## **Statement of Work**

# **Economy-wide Modeling and Policy Analysis Services**

#### **Purpose**

The proposed project involves development and enhancement of economic tools to analyze policy mechanisms to mitigate global emissions of carbon dioxide and other greenhouse gases into the atmosphere. This work represents a new five year contract and builds on existing work. The new contract will consist of a Base Year, Option Year One, and Option Year Two, Option Year Three and Option Year Four.

# **Task One: Greenhouse Gas Mitigation Analysis**

- A) Model Development
  - i) The Contractor shall continue development of a disaggregated household sector impacts representation. The Contractor shall continue work to enable IGEM to report impacts to households across a number of different variables, including regions, income groups and others.
  - ii) The Contractor shall continue to work with the Climate Change Division to develop appropriate representations of bottom-up technology models for selected sectors. These models will be provided by EPA and shall serve to enhance the IGEM representation of the impact of new technologies and policies. The models will be similar to the bottom-up models developed to represent non-CO<sub>2</sub> mitigation incorporated into IGEM in earlier option periods.
  - iii) The Contractor shall ensure that modifications to IGEM shall be done in a way that provides easy updating of the baseline emissions forecasts and mitigation options. All of the additional mitigation options introduced, including the technology mitigation, non-CO<sub>2</sub> mitigation MACs and sequestration MACs are subject to revision. The *AEO* emissions and GDP forecasts are also updated, as are the non-CO<sub>2</sub> forecasts
  - iv) The Contractor shall ensure that all required modifications to IGEM shall be introduced into the forthcoming re-estimated version of IGEM, which will have the increased functionality to use different baselines and have rector specific policy levers which allow for the adjustment of input prices by sector.
- B) Model Documentation, Presentations and Peer Review
  - i) The Contractor shall continue to ensure that the model and any modifications or enhancements to it are described in a model documentation available to the public.

- ii) The Contractor shall be available to give presentations on the model and analyses.
- a) The Contractor shall present the model, along with the developments identified above, to an EPA-organized one-day workshop. This workshop will allow the Principal Contractor and senior staff, along with EPA, to get comments and critiques from various stakeholders and analysts.
  - b) The Contractor Staff shall be prepared to attend meetings in which model findings or model description is to be discussed within EPA, or with interested stakeholders. For the purpose of developing a cost estimate, the Contractor shall assume 3-4 meetings during Option Period Three, lasting approximately two hours and including travel to Washington, DC. The Principal Contractor shall be assumed to be required to attend one of these meetings.
  - iii) The Contractor shall make the model subject to peer review under the direction of the

EPA Contracting Officer\(\sigma\)s Representative. For purposes of developing a cost estimate, the Contractor shall assume that an initial meeting shall take place in with a peer review panel in the Base Year, and that specific preparation and travel of the Principal Contractor to Washington, DC, shall be required for that meeting.

## Task Two: Quick Turnaround Analysis

The Contractor shall provide specialized expertise or perform model runs, on an as needed quick response basis to: (i) estimate the economy-wide and/or sector specific impacts of changes in energy prices and/or quantities (ii) estimate the economy-wide and/or sector specific impacts of emissions mitigation strategies (iii) review and comment on reports, data, or analyses provided by the EPA COR; (iv) revise existing analyses and reports; and (v) prepare presentations and present analyses to EPA staff and stakeholders. These quick response tasks may require the involvement of economists and senior economists who have expertise identified in the Statement of Work. For purposes of developing a cost estimate, the Contractor shall assume that four policy analyses subject to revision are to be performed in Option Period Three, along with ten pages of comments on reports or data and one presentation on the assumptions used for policy analysis.

The individual tasks and associated schedules and required deliverables will generally be sent by the EPA COR to the Contractor via fax or e-mail to ensure rapid turnaround. If the technical direction is issued verbally by the EPA COR for a specific task, then written technical direction shall be issued in writing to the Contractor by the EPA COR within two (2) working days of verbal issuance. Upon receipt of the technical direction the Contractor shall immediately contact the EPA COR if the Contractor has any questions or concerns about the scope of work, schedule, and/or deliverables. The written technical direction will be forwarded by the EPA COR to the EPA Contracting Officer for his or her information.

# **Task Three: Model Updating**

The Contractor shall keep the model updated. The Contractor shall update baseline forecasts using the version of the *AEO* as specified by the COR. The Contractor shall keep IGEM up to date with the latest emissions forecasts of non-CO<sub>2</sub> gases as supplied by EPA.

## **Task Four: Model Development**

The Contractor shall continue to refine and update the capacity of IGEM as additional data and methods become available. Examples of possible future model development efforts include:

- Incorporating new methods of accounting for technological change as the development of economic theory allows
- Directly incorporating transaction costs into exchanges of GHG allowances.

#### **Deliverables**

Due Dates for Deliverables under this Contract shall be specified in detailed Task Order Statements of Work.

### 1) EPA/Contractor Communication

The Contractor shall inform the EPA Contracting Officer\(\sigma\)s Representative of the status of the project by approximately monthly telephone calls.

#### 2) Documentation

The Contractor shall deliver the documentation described in Task One to the EPA Contracting Officer's Representative. The materials shall be in a format suitable for conversion to Section 508 compliance. The draft deliverable shall be reviewed by the Contracting Officer's Representative, with written comments returned to the Contractor. The Contractor shall deliver

the final version to the EPA Contracting Officer\( \sigma \) s Representative within four weeks of receipt of comments.

## 3) Presentation Materials

The Contractor shall deliver a draft version of any presentation to the EPA Contracting Officer's Representative three days prior to the date of any presentation materials. The materials shall be in a format suitable for conversion to Section 508 compliance. The EPA Contracting Officer's Representative will review the material and provide comments within one day for inclusion in the final version.

#### 4) Quick-Turnaround Analyses

The Contractor shall respond to tasks issued on a quick turnaround schedule. The scheduled due date for deliverables specified in the technical direction for a task will generally be within one to two weeks of receipt of the task. The schedule will be determined by the complexity of the work to be completed and will be provided in the written technical direction. The individual tasks and schedule will be generally sent by fax or e-mail to the Contractor to ensure rapid turnaround. The Contractor shall acknowledge receipt of the technical direction via fax or e-mail to the EPA COR. The acknowledgment shall provide an estimate of the level of effort required to complete the task.

- 5) Distribution of Deliverables
- EPA Contracting Officer ≤ Representative: One electronic copy

Disclaimer- Please note that this record provides the statement of work (SOW) from the current contract to help enhance competition. This information should not be relied upon for proposal preparation. Contractors are cautioned to prepare their proposal in accordance with the SOW in the solicitation when it is released.